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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/734,488	12/11/2000	Gene E. Lightner		5136

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Gene E. Lightner
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Federal Way, WA 98023-3549

EXAMINER

DAVIS, RUTH A

ART UNIT	PAPER NUMBER
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1651

DATE MAILED: 08/12/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/734,488

Applicant(s)

LIGHTNER, GENE E.

Examiner

Ruth A. Davis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Applicant's amendment has been received and entered into the case. Claims 1 – 20 are pending and have been considered on the merits. All arguments have been fully considered.

Claim Objections

1. Claim 13 is objected to because of the following informalities: The term “extactate” should be spelled “extractate”. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 – 20 remain rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims remain in narrative form and are replete with functional and/or operational language, thereby failing to particularly point out and distinctly claim the subject matter regarded as the invention. The claims remain unclear as to which limitations are functional/operational and those that are required steps in the claimed method. Moreover, it is unclear if the recited

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functions are steps in the method that must occur, or if they are merely descriptive in nature.

Examples of such language include but is not limited to:

In claim 10, microorganisms are employed for forming enzymes required for fermentation, however the claim appears to merely recite functional and operational aspects of the microorganisms. The claim does not specify a particular microorganism or enzyme being formed.

In claim 13 and its dependents, the claim appears to indicate the production of an extractate of gasoline and dissolved ethanol, however applicant argues the claim is drawn to an extractate of ethanol dissolved in gasoline. The claims remain unclear as to what exactly is produced.

Claim 16 remains vague and indefinite for reciting "the carbon dioxide" in lines 1 and 2. The recitation of carbon dioxide in the independent claim is so numerous that it is unclear which carbon dioxide is humidified by water.

Claim 16 stands vague and indefinite for reciting "humidified water" because the phrase remains unclear as to how water can be humidified. It is unclear what the phrase "without substantially producing humidified water" intends to convey.

Claims 18 and 19 remain vague and indefinite for reciting "the gasohol containing water" in line 1 as there is insufficient antecedent basis for the limitation in the claims.

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Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 – 4 and 6 – 10 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Hallberg in view of Tedder.

Applicant argues that the references do not teach providing CO₂ to humidify the ETOH within the fermentation broth, that Tedder uses an organic solvent to extract the ETOH and that the references teach methods for removing ETOH and CO₂ to moderate ETOH concentration.

However, these arguments fail to persuade because while the references do not teach that the CO₂ humidifies the ETOH, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Furthermore, although Tedder teaches use of an organic solvent, the reference is relied upon to demonstrate continuous fermentation wherein removal of sludge and addition of microbes, nutrients and sugars was common in the art.

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Finally, claim 1 specifically includes a limitation drawn to the moderation of ETOH concentration in the fermentation broth. As the references are also drawn to methods that may regulate ETOH concentration, the art is properly applicable.

Moreover, for the reasons above and those made previously of record, the claims are rendered obvious of the cited references.

6. Claims 1 – 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hallberg in view of Tedder and further in view of Turpin.

Applicant argues that the references do not teach providing CO₂ to humidify the ETOH within the fermentation broth and that the references teach methods for removing ETOH and CO₂ to moderate ETOH concentration.

However, these arguments fail to persuade because while the references do not teach that the CO₂ humidifies the ETOH, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Finally, claim 1 specifically includes a limitation drawn to the moderation of ETOH concentration in the fermentation broth. As the references are also drawn to methods that may regulate ETOH concentration, the art is properly applicable.

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Moreover, for the reasons above and those made previously of record, the claims are rendered obvious of the cited references.

7. Claims 1 – 11 and 17 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hallberg in view of Tedder and further in view of Chambers.

Applicant argues that the references do not teach providing CO₂ to humidify the ETOH within the fermentation broth and that the references are not applicable art.

However, these arguments fail to persuade because while the references do not teach that the CO₂ humidifies the ETOH, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Claim 1 specifically includes a limitation drawn to the moderation of ETOH concentration in the fermentation broth. As the references are also drawn to methods that may regulate ETOH concentration, the art is properly applicable.

Furthermore, although Tedder teaches use of an organic solvent, the reference is relied upon to demonstrate continuous fermentation wherein removal of sludge and addition of microbes, nutrients and sugars were common practices in the art at the time the claimed invention was made. Chambers demonstrates methods for providing gasohol wherein alcohol

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and gasoline are combined, dehydrated and condensed, thereby demonstrating such methods as claimed were well known in the art at the time of the claimed invention.

Moreover, for the reasons above and those made previously of record, the claims are rendered obvious of the cited references.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth A. Davis whose telephone number is 703-308-6310. The examiner can normally be reached on M-H (7:00-4:30); altn. F (7:00-3:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn can be reached on 703-308-0196. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4242 for regular communications and 703-308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Ruth A. Davis; rad
August 6, 2002



LEON B. LANKFORD, JR.
PRIMARY EXAMINER